U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE LIVESTOCK, MEAT, GRAIN & SEED DIVISION			_	FORM APPROVED: OMB NO. 0581-000 No certificate for plant variety protectio		
APPLICATION FOR PLANT VARI	IETY PROTE	CTION CERTIFICATE	may	be issued unless a completed appl n form has been received (5 U.S.(
1. NAME OF APPLICANT(S)	1. NAME OF APPLICANT(S) 2. TEMPORARY DESIGNATION					
MOMMERSTEEG INTERNATIONAL B.V.				CRYSTAL		
4. ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) 5. PHO		5. PHONE (Include area code)	FOR OFFICIAL USE ONLY			
P.O. Box 1		the Netherlands		PVPO NUMBER		
5250 AA VLIJMEN, the NETHERLA		4108-9116	yes.	8300174		
Festuca longifolia	GRAMINE		FILING	9/26/83 TIME 2:30 A.M. XP.M.		
8. KIND NAME	9.	DATE OF DETERMINATION	+-	AMOUNT FOR FILING		
Grasses (Hard fescue)		July 19, 1974	ECEIVED	\$1,000 DATE 9/26/83		
partiership, association, etc.)	10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.)		EES R	AMOUNT FOR CERTIFICATE \$ 500.00		
Corporation			II.	7/25/84		
11. IF INCORPORATED, GIVE STATE OF INCORPO	ORATION	THE REAL PROPERTY.	12. DATE OF INCORPORATION			
the Netherlands 13. NAME AND ADDRESS OF APPLICANT REPRES	SENIATIVE (C) IE	ANY TO STEEL THE STEEL S	2-26-1973			
 a. X Exhibit A, Origin and Breeding History of the Section 52 of the Plant Variety Protection Acts b. X Exhibit B, Novelty Statement 	e Variety (See ct.)	c. X Exhibit C, Objective D from Plant Variety Pro	tection			
15. DOES THE APPLICANT(S) SPECIFY THAT SEED SEED? (See Section 83(a) of the Plant Variety Pro	D OF THIS VARI	ETY BE SOLD BY VARIETY NAME Yes (If "Yes," answer				
16. DOES THE APPLICANT(S) SPECIFY THAT THIS LIMITED AS TO NUMBER OF GENERATIONS?	S VARIETY BE	17. IF "YES" TO ITEM 16, V BEYOND BREEDER SEE	VHICH			
Yes No	ALOS TUS VAS	Foundation	R	egistered Certified		
18. DID THE APPLICANT(S) FILE FOR PROTECTION OF THE VARIETY IN THE U.S. OR OTHER COU the Netherlands (January 22, 1976) Federal Republic of Germany (November 29, 1977)			NTRIE	Yes (If "Yes," give names of countries and dates) No		
19. HAVE RIGHTS BEEN GRANTED IN THE U.S. O	R OTHER COUNT	TRIES?	W.U			
The Netherlands (august 6, 1980) Federal Republic of Germany (March 16, 1981)				Yes (If "Yes," give names of countries and dates) No		
20. The applicant(s) declare(s) that a viable samp plenished upon request in accordance with sure The undersigned applicant(s) is (are) the own distinct, uniform, and stable as required in Se Variety Protection Act. Applicant(s) is (are) informed that false representations.	er(s) of this sexuection 41, and is	s may be applicable. Lally reproduced novel plant var. entitled to protection under the	iety, a provi	the application and will be re- nd believe(s) that the variety is sions of Section 42 of the Plant		
Applicant(s) is (are) informed that false representation herein can jeopardize protection and residual of APPLICANT						
Mommersteeg International (b.v. (I.J. Hintzen)			December 7, 1981			
SIGNATURE OF APPLICANT			DA	ATE 1		
FORM LMGS-470 (9-81) (Edition of 1-78 is obsolete)			1			

INSTRUCTIONS

General: Send an original copy of the application and exhibits, at least 2,500 viable seeds, and \$500 fee (\$250 filing fee and \$250 examination fee) to U.S. Department of Agriculture, Agricultural Marketing Service, Livestock, Meat, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (See section 180.175 of the Regulations and Rules of Practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

Item

- Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.
- Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.
- Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- 14c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.
- Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- If "Yes" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "No," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)
- See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.





Application for Plant Variety Protection Certificate

14 A Exhibit A, Origin and Breeding History of the Variety

Genus and Plant Species : Festuca longifolia

Variety : CRYSTAL

Genealogy and Breeding Method

In 1970 plants of a number of ecotypes have been collected in Southern-England. In 1970 and 1971 the material was observed in a single spaced plant nursery and a number of plants were harvested, threshed and the seed was seeded in turftrials in the fall of 1971. The harvested plants we cloned in several groups isolated by rye. These synthetics have been harvested in 1972 and seeded in turftrials in 1973. One of the synthetics was Mom Fod 11, based on 5 families. After a small multiplication, seeded in july 1974 and harvested in 1975 the variety was submitted for the first time in january 1976 in the Netherlands. In 1980 the variety was named CRYSTAL.

Reproduction and Multiplication

Seed of the 5 basic families has been dried and stored under dry and cold conditions. If necessary, we harvest first generation seed from single spaced plants derived from the 5 basic families. The next generations in the seed production are: $\underline{2}$. Prebasic Seed (= Breeder's Seed) $\underline{3}$. Basic Seed (= Foundation or Registered Seed) and $\underline{4}$. Certified Seed.

Crystal is a synthetic variety of a cross-fertilizing species. Within this type of varieties there is a certain allowed degree of variance within the properties used for protection. All plants of Crystal, produced in the several generations, are within this type of variance.

Uniformity and Stability

The above mentioned method of maintaining and multiplicating a synthetic grass-variety has proven to work very well. Until now we did not have any difficulty concerning uniformity and stability in our own trials, comparing the several generations.

Also the dutch authorities of RIVRO (Variety Research Institute) and the NAK (Certifying Agency) did not have problems with uniformity and stability testing prebasic and basic seed.

The variety Crystal has obtained protection in the Netherlands and in the Federal Republic of Germany. The dutch and german authorities have declared the variety to be distinct, uniform and stable.





Application for Plant Variety Protection Certificate

14 B Exhibit B, Novelty Statement

Genus and Species : Festuca longifolia

Variety : CRYSTAL

Crystal is a rather late heading variety of hard fescue with a darkgreen leafcolor.

The variety most closely resembles Scaldis, but it differs from Scaldis by:

- a). a later heading date (3 days)
- b). a shorter mature plant height (15 cm)
- c). a shorter flagleaf (11 mm)

The following trial results are from Wageningen, the Netherlands (3 reps of 20 plants for every variety every year).

Characteristic	Year	Crystal	Scaldis	LSD 1%
A. Heading date (after march 31)	1977 1978 1979 1980 1981	37 32 45 35 27	33 28 44 33 22	3.1 day 4.6 2.9 2.9 4.3
B. Mature plant height (in cm)	1977	65	79	4.8
	1978	51	65	4.1
	1979	62	75	4.3
	1980	56	75	6.5
	1981	67	83	5.1
C. Length of flagleaf (in mm)	1977	66	75	10.6
	1978	40	45	7.4
	1979	43	56	8.0
	1980	59	79	11.1
	1981	56	67	8.4

8990171

BONDINED ENDRIDO PRECAL



No.



8300174

THE DUNKTED STRATES OF ANDERSON

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Mommersteeg International, B.O.

Withereas, there has been presented to the

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S). AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF eighteen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC DOF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXOTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT 42, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

HARD FESCUE

'Crystal'

In Eastimony Whereot, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this 28th day of September in the year of our Lord one thousand nine hundred and eighty-four.

John R Block

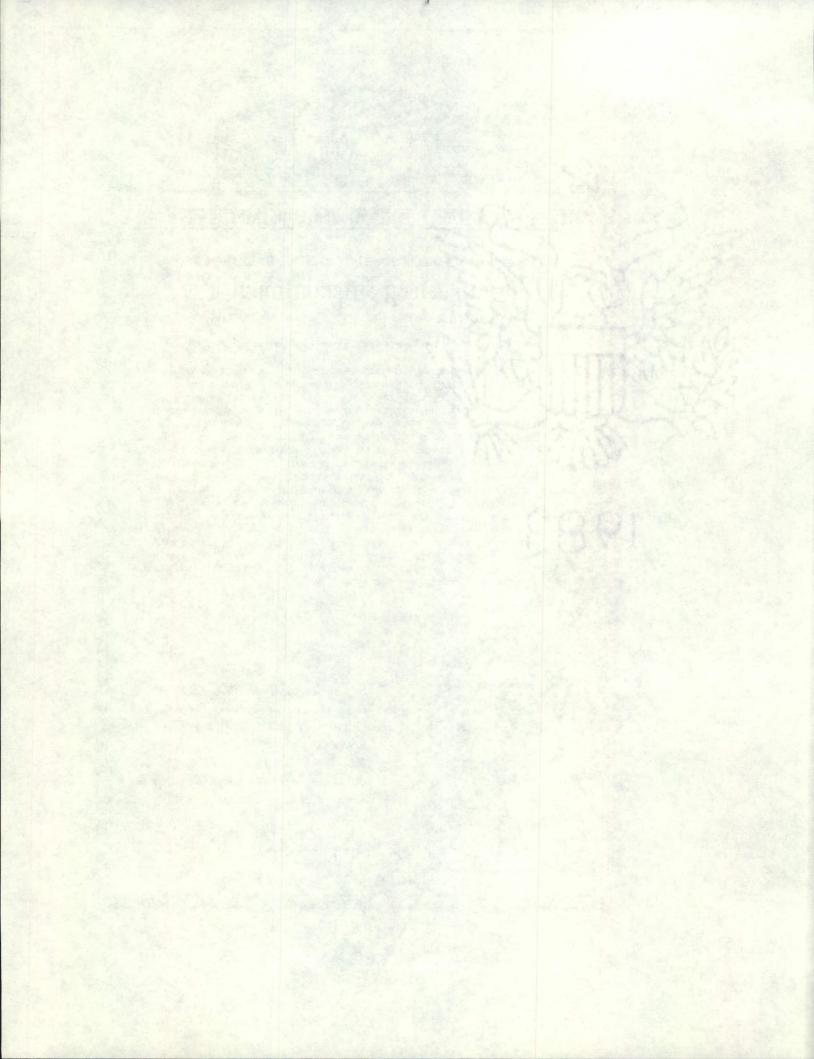
Secretary of Agriculture

1.

Senneth Heran

Plant Variety Protection Office Agricultural Marketing Service

AXAAXX



U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, MEAT, GRAIN & SEED DIVISION
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MARYLAND 20705

EXHIBIT C (Fine Leaved Fescues)

Page 1 of 4

OBJECTIVE DESCRIPTION OF VARIETY FINE LEAVED FESCUES

(Festuca spp.)

		(i estuca spp.)			
NAME OF A	APPLICANT(S)	TEMPORARY DESI	GNATION VARIET	YNAME	
	TEEG INTERNATIONAL B.V.			YSTAL. FOR OFFICIAL USE ONLY	
P.O. Bo	(Street and No. or R.F.D. No., City, State, and Zip Code	?).	PVPO NI		
5250 AA				8300174	
Place the ap	propriate number that describes the varietal character of). Characteristics described including numerical measur ED PLANTS. Royal Horticultural Society or any recog	rements, should represe nized color fan may be	nt those that are typic used to determine plan	al for the variety. Measured data should	
Wagenin	gen, the Netherlands. Every year	60 plants in	3 reps. Addit:	ional row trials.	
1. SPECIES	: (With comparison varieties for use below - use varietie	s within species of app	lication variety)		
5	The state of the s	11 = Cascade 14 = Banner	12.= Highlight 15 = Barfalla	13 = Jamestown	
	2 = F. rubra ssp. litoralis (Creeping Red)	21 = Dawson	22 = Starlight	23 = Merlin	
	3 = F. rubra ssp. rubra (Spreading Red)	24 = Pennlawn 31 = Boreal 34 = Ensylva	32 = Ruby	33 = Fortress	
		41 = Covar			
	5 = F, longifolia (Hard)	51 = Durar	52 = Biljart (C-26)	53 = Scaldis	
	6 = F. tenuifolia (Fine-Leaved Sheep)	61 = Panda	62 = Barok		
	7 = Other (Specify) F.				
2. CYTOLO	OGY:				
42	Chromosome Number 3 Ploidy	1 = diploid 4 = octoploid	2 = tetraploid	3 = hexaploid	
2		Central 2 Pa	acific N.W.	Other (Specify)	
4. MATUR	ITY: Date First Headed (panicle emergence) Location(s	s) of Trail(s)Wag	eningen, the	Netherlands	
2		irly (Highlight) ite (Jamestown, Agram		dium Early (Boreal, Dawson) ry Late	
	Date Headed	,			
	Days earlier than				
	Maturity same as	Comparison Variet	У		
0 3 Days later than					
5. PLANT HEIGHT: (At maturity; to top of panicle; Average of 10 tallest culms)					
600	mm height	1			
1 5 0	mm shorter than				
	Height same as	Comparison Variet	У		
	mm taller than				
6. GROWT	H HABIT: (Mature)				
3	1 = Erect (Ruby) 2 = Semi-erect (H	Highlight) 3	= Prostrate (Silvana)		
7. RHIZON	IES:				
mm Length mm Width mm Internode length					
1	1 = Absent (Highlight) 2 = We 4 = Very Strongly Creeping (Fortress)	eakly Creeping (Dawson	n) 3 = Str	ongly Creeping (Boreal)	

FORM LMGS-470-37 (9-81) (Formerly Form LPGS-470-37 (3-79), which is obsolete.)

15. GIVE VARIETY OR VARIETIES THAT MOST CLOSELY RESEMBLE THE APPLICATION VARIETY. For the following characteristics indicate Degree of Resemblance by placing the column marked, D.R., one of the following numbers:

1 = Application variety is less than comparison variety.

2 = Same A

3 = More than, better, greater, darker, more disease resistant, etc.

CHARACTER	VARIETY	D.R.	CHARACTER	VARIETY	D.R.
Rhizome Length			Growth Habit	SILVANA	2
Leaf Width			Leaf Color	BILJART	3
Panicle Color			Panicle Shape		
Winter Color	BILJART	3	Cold Injury		
Shade Tolerance			Heat		
Prought			Disease *		
			Fusarium nival	e BILJART	3

^{*} Specify each disease evaluated.

Describe all characteristics that cannot be adequately described in the form above in Exhibit D. Comparative varieties should be used as may be appropriate, such as for disease. Append all comparative trial and evaluation data, including measured characters, environmental, and disease tests.

Page 4 of 4

^{16.} ADDITIONAL DESCRIPTION: (Use additional sheets as required)



Thomas A. Salt, Senior Examiner Plant Variety Protection Office USDA-AMS NAL Bldg, Room 500 10301 Baltimore Boulevard BELTSVILLE, MARYLAND 20705-2351 USA

Vlijmen, December 7, 1999

Our ref: m9-49201

Your letter of November 23, 1999 to Advanta Seeds BV (Change in Ownership and Holder of Plant Variety Protection of Mommersteeg International BV to Advanta Seeds BV)

Dear Dr. Salt,

Mommersteeg International BV, a subsidiary company of Advanta Seeds BV, is still existing as a trading company in grass seeds, but not as a breeder and maintainer of varieties. All the breeding activities have been taken over by Advanta Seeds BV.

For that reason we want a change in assignment from Mommersteeg to Advanta Seeds BV for the following varieties (still maintained, produced and commercialised):

Annual ryegrass	MULTIMO	8200021
	CARAMBA	8200042
Perennial ryegrass	FANTOOM	8400040
	MONDIAL	8900057
Red fescue	VICTOR	8900063
	MOLINDA	9300043
Hard fescue	CRYSTAL	8300174
Kentucky Bluegrass	CYNTHIA	8300017

The remainder of the varieties is not existing anymore or hardly in production.

Yours faithfully,

MOMMERSTEEG INTERNATIONAL BV

J.J. Hintzen

Member of Advanta

Postbus 1, 5250 AA Vlijmen, Holland

Adres: Wolput 72, Vlijmen Tel.: 073 - 511 91 16 - Fax: 073 - 511 75 40 BTW-nr: NL 00 70 54 889 B 07 Bank: Rabobank International 3000 27 982 Handelsregister: 16 00 31 25 E-mail: msg@mommersteeg.nl





Thomas A. Salt, Senior Examiner Plant Variety Protection Office USDA-AMS NAL Bldg, Room 500 10301 Baltimore Boulevard BELTSVILLE, MARYLAND 20705-2351 USA

Vlijmen, December 7, 1999

Our ref: m9-49202

Re: Your letter of November 23, 1999 to Advanta Seeds BV (Change in Ownership and Holder of Plant Variety Protection of Mommersteeg International BV to Advanta Seeds BV)

Dear Dr. Salt,

and the second second second second

Enclosed you will find a letter of Mommersteeg International BV, explaining the reason of the change in assignment.

As said also in that letter we like a change in assignment from Mommersteeg International BV to Advanta BV for following varieties:

Annual ryegrass	MULTIMO	8200021
	CARAMBA	8200042
Perennial ryegrass	FANTOOM	8400040
	MONDIAL	8900057
Red fescue	VICTOR	8900063
	MOLINDA	9300043
Hard fescue	CRYSTAL	8300174
Kentucky Bluegrass	CYNTHIA	8300017

We will remit the cost for the change in assignment, a sum of 8 x US\$ 25,- = US\$ 200,- through our US sister company Advanta Seeds Pacific (together with US\$ 25,- for the change of the variety COCKTAIL from VanderHave Grasses to Advanta).

Yours faithfully,

ADVANTA SEEDS BV

A.J.P. van Wijk

J.J. Hintzen

Encl.: Letter of Mommersteeg International BV

Advanta Seeds B.V. Wolput 72A 5251 CH VLIJMEN The Netherlands Phone: 31 (0)73 511 91 16 Fax : 31 (0)73 511 50 35 Mail Address: P.O. Box 127 5250 AC VLIJMEN The Netherlands Registered under Chamber of Commerce No. Middelburg 22000154

